

AMENDMENTS TO THE SPECIFICATION

Replace the paragraph starting at page 3, line 8, with the following replacement paragraph:

One aspect of the present invention provides a method in a host channel adapter. The method includes receiving a work notification request for a specified service level, each specified service level associated with a prescribed virtual lane, and determining, from a link layer module, an ordering position for the prescribed virtual lane corresponding to the specified service level relative to other virtual lanes. The method also includes selectively servicing the work notification request based on the corresponding determined ordering position. Determining from the link layer module the ordering position for the prescribed virtual lane corresponding to the service level enables the host channel adapter to determine whether the work notification request is associated with a virtual lane requiring immediate servicing, for example a virtual lane currently being processed by the link layer module, or a virtual lane that does not require immediate servicing (e.g., a virtual lane having just been serviced within a prescribed sequence and that will not be ~~service~~ serviced before other virtual lanes have been serviced). Hence, the selective service of the work notification request enables the host channel adapter to coordinate work notification processing resources with the link layer module resources, optimizing host channel adapter performance.

Replace the paragraph starting at page 5, line 26, with the following replacement paragraph:

As described below, the transport layer module 14 maintains a service level / virtual lane mapping table that maps a service level specified by the verbs consumer 22 to a prescribed virtual lane maintained by the link layer module 16. In response to receiving a work notification request 20 that identifies a specified service level, the transport layer module 14 determines the corresponding virtual lane for the specified service level, and determines from the link layer module 16 the current ordering position identified for [[to]] that virtual lane within the ordering sequence utilized by the link layer module 16. The ordering sequence may be a priority-based

ordering sequence, where each ordering position is established by a priority-based arbitration; alternately, the ordering sequence may be arbitrary, where the ordering position is based on when the virtual lane was last serviced relative to the other virtual lanes. The transport layer module 14 can then selectively service the work notification request 20, for example selectively retrieving the WQE 26 from system memory 30 via DMA transfer, based on the corresponding determined ordering position for the corresponding virtual lane.